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DEFENSE'S STREAMLINED ACQUISITION PROGRAM

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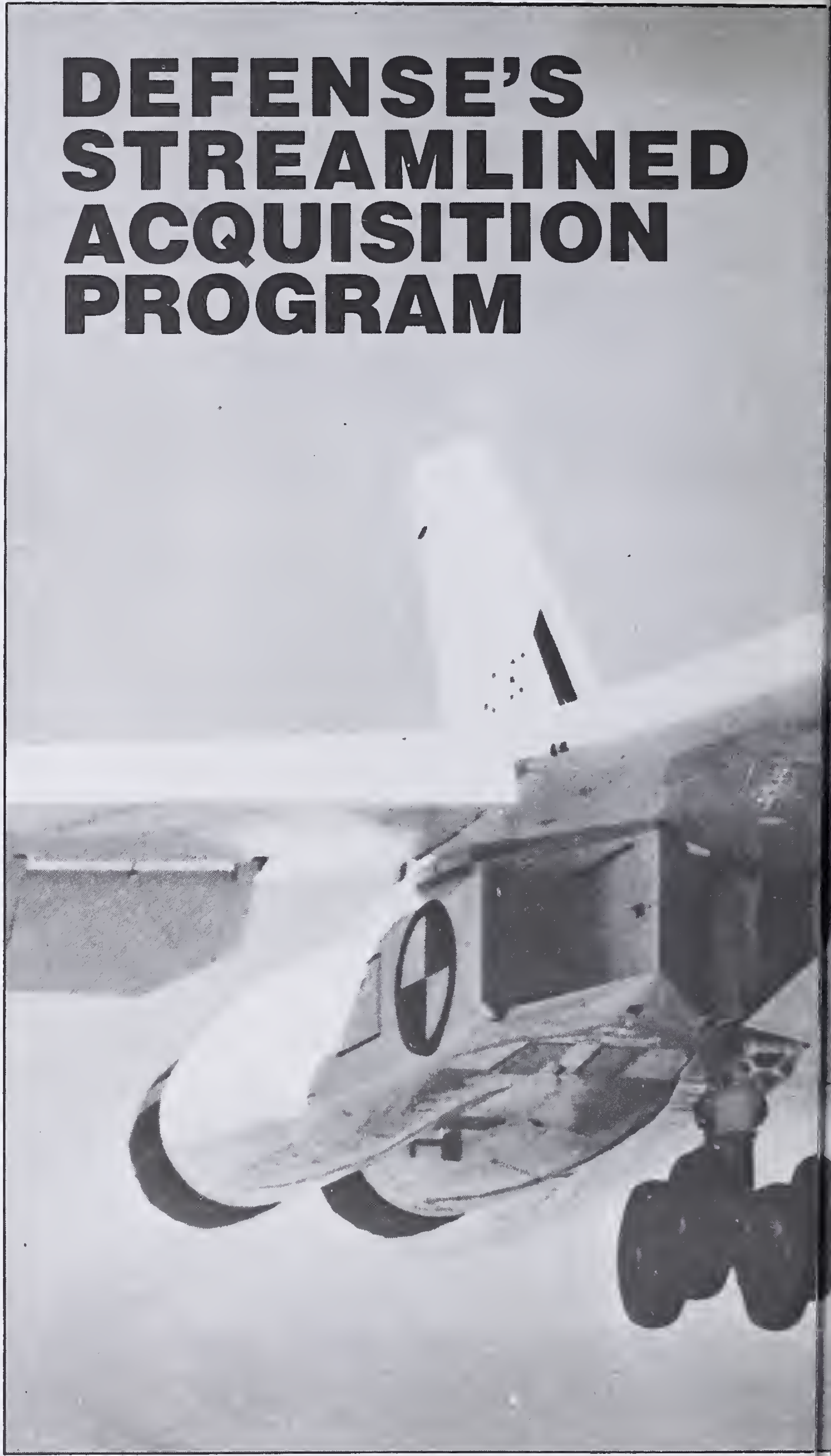
VOL. 21, NO. 7/MAY 18, 1978

DEFENSE'S STREAMLINED ACQUISITION PROGRAM



By Charles W. Duncan Jr.
Deputy Secretary of Defense

One of our major objectives in the Pentagon is to improve the quality of the Department of Defense as a customer. Since the methods by which we acquire our goods and services most directly reflect that quality, I will focus on these methods—pro and con—in this article.

The Defense Acquisition Program, because of its size, receives much publicity. Unfortunately, the publicity usually centers on our mistakes rather than our successes. This is not to say we haven't botched some programs. Nevertheless, I think in general terms we have a relatively successful and well-managed acquisition system for an organization which is trying to procure billion dollar systems over five to six year time spans and involving state-of-art technology.

We are spending the taxpayer's money. We are accountable to the President, the Congress and the public for our performance. Because of the size of our expenditures, even seemingly insignificant improvements in the process can save millions of dollars. Consequently, we are continually looking for ways to improve our acquisition procedures.

Competition

Before instituting any acquisition procedure, we first must recognize that we are dealing in a free enterprise society. When we go to industry to get proposals for building our defense systems, we must recognize that competition essentially dictates success or failure of the companies with which we deal. Those companies which are successful are so because they have learned to compete effectively. It is fundamental

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The B-1 Bomber Program was one of several which were cancelled after a number of years of research and the expenditure of several billion dollars.

DEFENSE NEWS BRIEFS

Solar Energy

Defense officials, in noting the Presidential "Sun Day", proclaimed May 3, pointed out that the military establishment, with more than 100 solar heating and cooling units in operation or under construction, is one of the major Government users of solar energy.

Presently, DoD saves 4,000 barrels of oil annually by solar energy and expects to save 600,000 barrels a year by 1985.

DoD also is attacking the demand side of the equation, slicing energy consumption by 32 percent in a three-year period from 1973-1976.

DoD Re-Reviewing Deserters, Undesirables

DoD is now "re-reviewing," by order of Congress, all those cases of individuals given upgraded General Discharges in two 1977 programs to determine whether, under existing standards, if these discharges rate Veterans Administration benefits.

The two special discharge programs under review are President Ford's of January 1977 for deserters and President Carter's of April 1977 for undesirables in the Vietnam era.

Congress enacted Public Law 95-126 on Oct. 8, 1977, requiring this additional determination for VA eligibility.

Only VA benefits are being assessed. Previous upgradings will remain in force regardless of the VA eligibility determination.

All former Servicemembers affected have been notified of the new review.

Mississippi Latest State To Require Tax Withholding

Military men and women from Mississippi will find less in their pay checks after June 1, as that state joins 29 others and the District of Columbia in requiring the withholding of State income taxes.

Mississippi was one of the States that required filing a return and paying taxes but has just changed its code to require monthly withholding.

General Brewer

First Woman Marine General

The President recently nominated **Col. Margaret A. Brewer** for promotion to brigadier general. Now confirmed by the Senate, she is the first woman general in the history of the U.S. Marine Corps, and holds the rank while serving as director of the Division of Information, Headquarters Marine Corps.

Currently serving as deputy information director, the general also has been Director of Women Marines, a post no longer in existence.

"Our women have demonstrated repeatedly that they can function in the Marine Corps environment," said Marine Corps Commandant, Gen. Louis H. Wilson.

By September 1979, some 5,100 women are expected to be on duty with the Corps, and plans call for 10,000 women marines in the next decade.

MX Land Screening

Air Force has told 10 western state Governors and the Congressional delegations from the states about its MX ICBM land-screening program.

Air Force stressed the screening is to identify and evaluate, not to identify potential sites.

The Department of Defense has not yet decided whether to recommend the MX for ultimate deployment.

That decision will depend on the outcome of the developmental effort and analyses now underway. It would also require the approval of the Congress.

AF Names New Aircraft

Air Force's new wide-bodied tanker aircraft, a modification of the familiar DC-10 airliner, has been given the numerical designation KC-10A.

Besides refueling fighter and transport aircraft, the KC-10A can simultaneously carry equipment and personnel on overseas deployments.

Back Pay For Teachers

The Department of Defense is urging former teachers of the Dependent School System overseas who were employed between April 14, 1966, and June 30, 1975, who have not received or applied for back pay to do so before the Nov. 1, 1978 cutoff date.

The court, in a class action suit, ruled that DoD had been compensating teachers under a year-old salary schedule and failed to give teacher pay credit for teaching experience equal to the prevailing practice of a major portion of large stateside school districts. The court ruled maximum payment is $10,000 before taxes.

DoD already has compiled a list of some 20,000 current and former teachers. About 25 percent have been paid, with the average check being between $3,000 and $4,000.

Those who have not heard from DoD should write: **Back Pay, 2461 Eisenhower Ave., Alexandria, Va. 22331** and provide the following information: name under which employed, date of birth, social security number, inclusive dates of employment, if currently a Federal government employee, name and address of the agency.

No further action is required.

to any of our acquisition procedures that we find ways to take maximum advantage of this competition.

There are inherent limitations on what can be done from the Pentagon through the policy process to improve contractor efficiency or productivity. Recognizing this, our objective is to use the economic and other motivating factors of the competitive environment to encourage industry to take the appropriate action. Industry has to manage itself.

Unfortunately, one response of the Government's regulatory bodies to the mistakes of the past has been to add more new regulations and more personnel to enforce and administer those regulations. These new regulations are often added without eliminating those which have not worked and without regard to the danger of their application to situations for which they were never intended. These further encumbrances to the acquisition process add time and cost. So, one of our chief objectives is to improve the quality of our management while decreasing the quantity. This was the principal reason for designating the Under Secretary of Defense (Research and Engineering) as the Defense Acquisition Executive. In this new role, the acquisition executive will focus on the management of the total system program and not just its parts.

OMB Policies

Another important change is found in our mission-focused directives which have been the policies of the OMB (Office of Management and Budget) circular A-109. I strongly support these policies. DoD will be able to perform its acquisition mission more effectively if intelligent use is made of them. The new process is not a panacea—it's not going to solve all of our acquisition problems. If improperly applied, it could aggravate rather than help.

Major Systems Acquisitions

(Circular No. A-109)

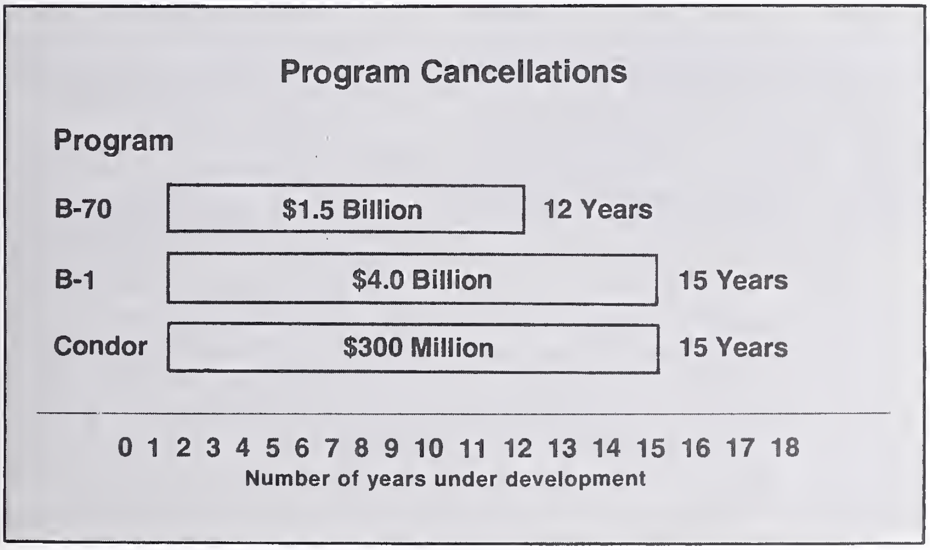
PURPOSE: This circular establishes policies, to be followed by Executive Branch agencies in the acquisition of major systems.

BACKGROUND: The acquisition of major systems by the Federal Government constitutes one of the most crucial and expensive activities performed to meet national needs. Its impact is critical on technology, on the Nation's economic and fiscal policies, and on the accomplishment of Government agency missions in such fields as defense, space, energy and transportation. For a number of years, there has been deep concern over the effectiveness of the management of major system acquisitions. The report of the Commission on Government Procurement recommended basic changes to improve the process of acquiring major systems. This circular is based on Executive Branch consideration of the Commission's recommendations.

RESPONSIBILITY: Each agency head has the responsibility to ensure that the provisions of this circular are followed. This circular provides administrative direction to heads of agencies and does not establish and shall not be construed to create any substantive or procedural basis for any person to challenge any agency action or inaction on the basis that such action was not in accordance with this circular.

COVERAGE: This circular covers and applies to management of the acquisition of major systems as well as programs for the acquisition of major systems.

Other areas covered in this circular include: Definitions; General Policy; Major System Acquisition Management Objectives; Management Structure; Key Decisions; Determination of Mission Needs; Alternative Systems; Demonstrations; Full-Scale Development and Production; Information to Congress; Budgeting and Financing; Implementation; Submissions to Office of Management and Budget, and Inquires.



Biggest Complaint

Probably the biggest complaint by industry has been the instability of the Government as a customer. This problem manifests itself in turnover of personnel; the lack of attraction of Defense-related business opportunities to new entrepreneurs; the difficulty of attracting quality engineers and scientists to Defense companies; the significantly higher price we must pay for their talents; and last, but not least the difficulties contractors face in obtaining financing, let alone at competitive rates.

There is nothing more aggravating to the system, more irritating to Congress, nor more frustrating to DoD's contractors than to be halfway into a program and have it cut off. If you look at the history of programs that have been cut off through the years, a disappointingly high percentage were terminated for reasons which could have been anticipated before the start of development. These failures were basically the result of a requirements versus an affordability issue.

Therefore, it is very important to start the total acquisition process properly. The task is one of realistically describing the mission element needs to fill existing deficiencies. That means we must pay strict attention to the requirements issue, including the attributes and deficiencies of existing systems. At this point, we must also address the affordability issue in relationship to the probable total budget allocation that will be available to the advocating services. We must not get the Government embarked on the development of a new system which when we finally face the question, "Can we afford to buy it?", the answer is "No".

There are two reasons for wanting to avoid that dilemma:

- we must not waste the taxpayer's money;
- we cannot undermine industry by causing it to add facilities and staff to reach a certain point and then cancel the program. That situation is most destructive to the Government-contractor relationship and we want to avoid it at all costs.

MENS

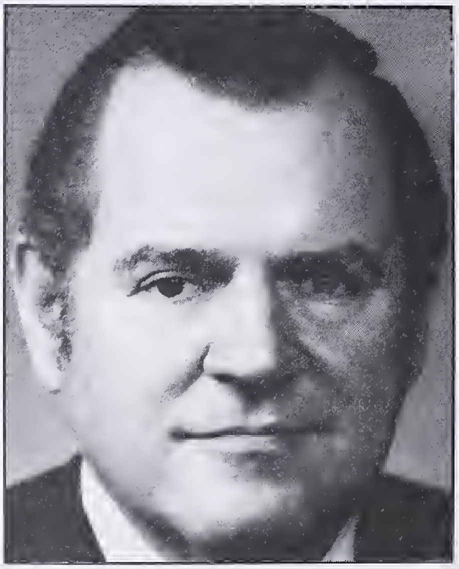
There is one other point worth mentioning here. Sometimes after we conclude that we should stop a program, we find that it is impossible to do so. A program can build up tremendous momentum of its own, can build up constituents in industry,

Charles W. Duncan Jr.
(Deputy Secretary of Defense)

Charles William Duncan Jr. is the Deputy Secretary of Defense. He took the oath of office for this position on Jan. 31, 1977, after being nominated by President Carter and confirmed by the U.S. Senate.

Born in Houston, Texas, Sept 9, 1926, Duncan attended public schools in Houston, was graduated from Rice University in 1947 with a B.S. degree in Chemical Engineering, and completed two years of graduate study in management at the University of Texas.

Following his graduation from Rice, he worked as a roustabout and chemical engineer with Humble Oil and Refining Co. During World War II he served in the U.S. Army Air Corps.


Deputy Secretary Duncan

Duncan joined Duncan Coffee Co., the predecessor of Duncan Foods Co., in 1948. He became president of the firm in 1958. When Duncan Foods Co. merged with Coca Cola Co. in 1964, he became a member of the Coca Cola Co. board of directors.

He was elected Executive Vice President of the Coca Cola firm in 1970, and President in 1971. He resigned this position in 1974 to return to Houston.

At the time of his nomination to become deputy secretary of Defense, Duncan was serving as chairman and director of the Rotan Mosle Financial Corp. He also was serving on the board of directors for several companies, including the Coca Cola Co. He was advisory director for the Texas Commerce Bank Shares, Inc., and a member of the advisory council for the Trust Company of Georgia.

He served as vice chairman of the board of trustees for Rice University and also was a member of various other boards of civic, charitable and education organizations.

in the DoD and in the Congress. The more constituents we create, the more pressure is exerted to continue. It becomes more and more difficult to stop a program. Therefore, the first change in the acquisition process is to attack the front end of that process—program initiation. The tool will be Milestone O and its documentation known as the Mission Element Need Statement (MENS). This is nothing more than the market research analysis tool, much like that used by industry to justify investment or non-investment decisions. What we want to do is to prevent random processes from developing and to minimize the possibility of false starts.

We believe the MENS approach will result in more timely consideration and deliberation of the factors surrounding the mission need. We see great potential to eliminate historical bottlenecks and shorten the total acquisition cycle. Approval of the MENS at Milestone O and reaffirmation by the Secretary of Defense throughout the system acquisition process will reinforce a program's continued support.

Beginning with this Milestone O, the Department of Defense will try to answer the question of alternative ways to meet the requirements and evaluate those alternatives before the design process begins. Two MENS have already been approved by the Secretary of Defense, and several more are scheduled for approval review in the months ahead.

10-Year Old Technology

We have seen, during the past decade, an acquisition cycle increasing both in time and cost. This increase has had a very harmful effect on our defense capability because it delays the achievement of a needed operational capability and it ends up costing more. But there is another more insidious factor. By the time a system gets deployed and becomes operational it incorporates technology which is eight to 12 years old. We are competing with the Soviet Union which is outspending the United States by 50 percent in defense investments. So far, we have been able to hold our own through superior technology. Thus, our equipment is better even though there is not as much of it. We have, in most technical fields, a five- to seven-year lead. But if the equipment we are putting in the field represents the United States' 10-year-old technology and the equipment they are putting in the field represents the Soviet's five-year-old technology, we have just sacrificed a five-year technological lead. Since we are not inclined to want to match the Soviet investment in defense, a situation is posed where we could fall behind quantitatively without the compensating virtue of having the qualitative edge we now have. Therefore, it is important, whatever we do, to shorten the acquisition cycle.

The System Acquisition Process

Milestone O—Program Initiation

- Validate Mission Needs
- Approved MENS (Mission Element Need Statement)

Milestone I—Demonstration and Validation

- Reaffirm Mission Need (MENS)
- Selection of System/Subsystem Alternatives
- Approved DCP (Decision Coordinating Paper)

Milestone II—Full Scale Engineering Development

- Reaffirm Mission Need (MENS)
- Selection of Alternative System Choice
- Tenative Commitment to Produce and Deploy
- Approval of Updated DCP—Authority to Develop

Milestone III—Production and Development

- Reaffirm Mission Need (MENS)
- Approve Updated DCP—Authority to Produce and Deploy

Produce and Deploy

The second change in the process is to introduce into the Milestone II decision a tentative commitment to produce and deploy. At Milestone II, by authorizing full-scale development, we are undertaking a major expense. At that stage we should again explicitly consider those other factors of the affordability issue, i.e., projected production and operational and support costs over the system's life cycle.

Although we may not be able to consider the system cost relative to what a DoD budget will be, we can at least consider it relative to some expectation of the funding level of the particular Service. If by looking ahead five to 10 years, we have serious doubts about being able to afford to produce and maintain a system, then maybe we ought to back-off from the decision to go ahead. So, a Milestone II determination is both a decision for full-scale development and a tentative determination that we can afford to produce, operate and maintain the system during its total life cycle. This decision, of course, is tentative only in that it depends on whether the full scale development program meets its objectives.

Next, we are attempting to control the cost of major weapon systems by continuing competition in all acquisition actions throughout the total life of the system. To further this objective, we will carefully analyze the use of prototypes built by two or more competitors leading to more comprehensive "Fly-offs." The use of this technique is particularly applicable where very large quantities are to be procured. The first candidates which come to mind are the Cruise missile and its various subsystems, the Copperhead artillery projectile, Stinger missiles, and certain components of the F-16.

Winning Competitor

There are several ways to do this. One is a method whereby the winning competitor receives more than half of the quantity production for the phase and the loser gets the remainder. The next contract for the same item would also be recompeted and the previous loser could well become the winner due to his innovations in production techniques. This kind of production competition works best on large quantity procurements and may not be applicable to major systems which are highly complex or will be procured in small numbers. It certainly will be applicable to those where we do have adequate design data and production drawings and long production runs.

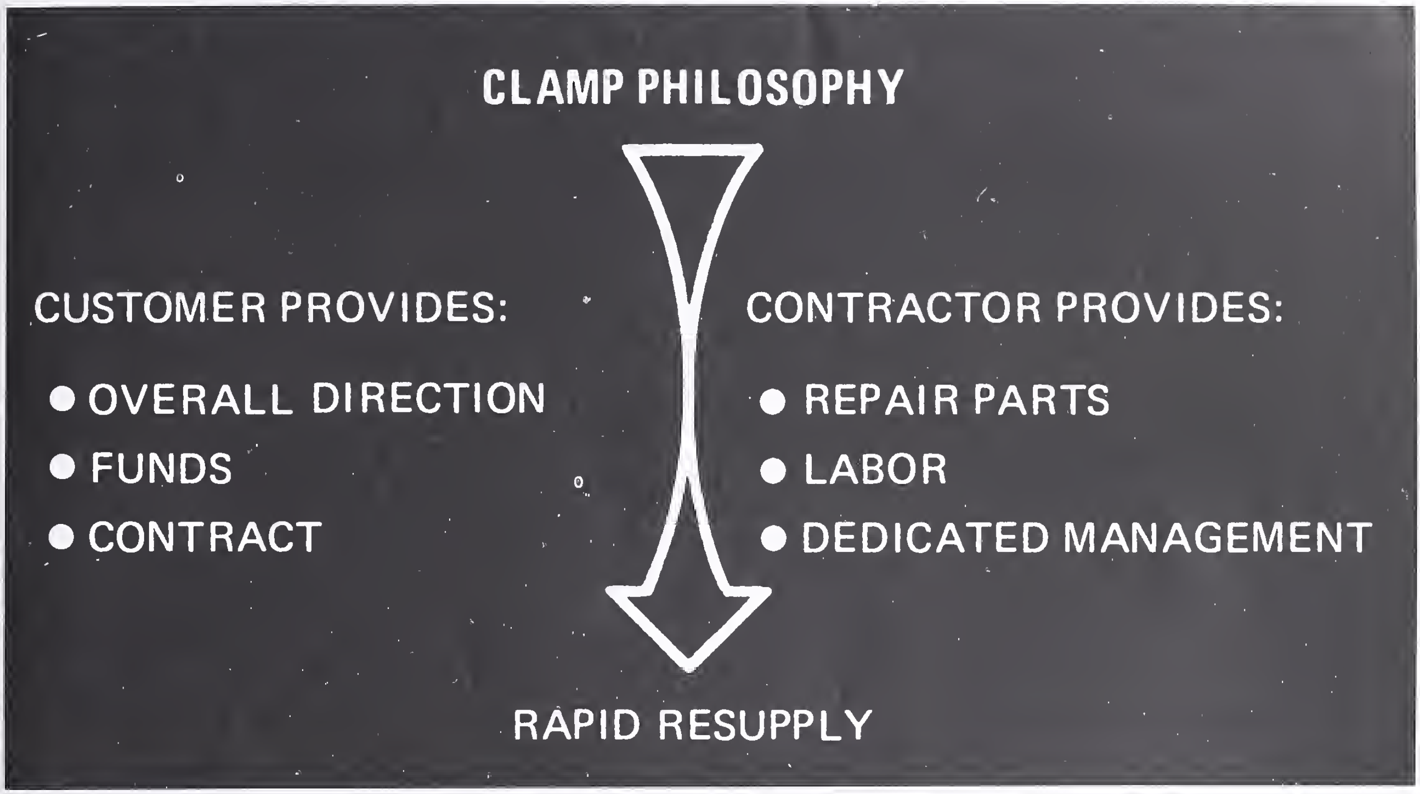
This procedure must be used judiciously, considering the

Mission Element Need Statement (MENS)

- Identifies Mission Area by Performance Tasks
    - —Does Not Specify System Capabilities or Characteristics
- Assesses the Threat
- Analyzes Existing Capabilities to Meet Mission Tasks
    - —Identifies Deficiencies/Attributes
    - —Projected Obsolesence
    - —Technological or Cost Saving Opportunities
- Establishes Recognized Boundary Constraints
    - —Operational and Logistical Consideration
    - —NATO Standardization/Interoperability
    - —Resource/Time Limitations
- Assesses Impact of Capability Void
- Provides Program Plan to Evaluate Competitive Alternative System Approaches

Basic Steps in Specification Application

- Select Those Documents That May Have Application to the Specific System
- Identify from These the Ones That Have Specific Application
- Select Requirements from Each Document That Are Necessary to Achieve Mission Need
- Tailor these Requirements to Specially Match System Needs During Acquisition and Life Cycle Ownership



substantial start-up costs involved in such competitions. However, a major part of the production competition involves maximizing the competition at subcontract level. This not only will improve DoD's industrial base, but will allow for greater participation by small business and minority enterprises.

There will be times when the additional initial costs involved in this approach may appear to outweigh the advantages. However, we consider it a valid approach to hold down costs and to provide an incentive for innovation. Spreading the business base for weapon systems beyond one supplier will not only benefit him but other suppliers as well. The current practice has been to choose only one competitor, the so-called "winner", to produce the system following the "fly-off". In the first place, an overwhelming winner does not always emerge from such competition. Secondly, significant unexpected changes often occur after the competition which are not really a part of the competition. Thirdly, and most important perhaps, the winner is placed in a "feast" condition which often is well beyond his existing capabilities. This may cause him to make additional investments in plant, equipment and personnel or to subcontract large portions of the system beyond that planned during the development.

Focus Shift

Another new emphasis is to shift the focus from the system price, which only takes into account the initial buy. We are now focusing on the total life cycle cost of the system which includes operations, maintenance and support in the real world environment of military operations. Focusing on the initial price has resulted in countless cost-growth increases to contracts. The initial figures which appear on contracts have little or no relevance to the final contract price, let alone what additional cost Defense will incur once the system is placed into operation.

Cost growth is attributed to two main causes—economic and programmatic. The economic cause is often beyond our control, but can probably be better estimated than in the past. There are steps that can be taken to improve the programmatic causes. DoD must do a better job of both estimating and controlling these cost drivers.

To accomplish this, Defense must first change the attitudes of the people in Government and industry who are overly oriented toward recovery of cost, disallowance of costs, and the challenging of cost elements. We should all be primarily concerned about acquiring the best product for a fair and reasonable price. However, we must be very careful in ferreting out those overly aggressive bids which could lead us into more cost growth situations. This is particularly true of contracts where significant development is yet to be accomplished. In the high technology environment of today, we must plan for adequate test and evaluation.

To avoid these situations, the competition will be based on the best technical approach to fulfill the mission within the guidelines of what we can afford. To accomplish this we will work with the contractors to develop realistic tailored specifications and then together figure out what the development really should cost.

Four Step Procurement

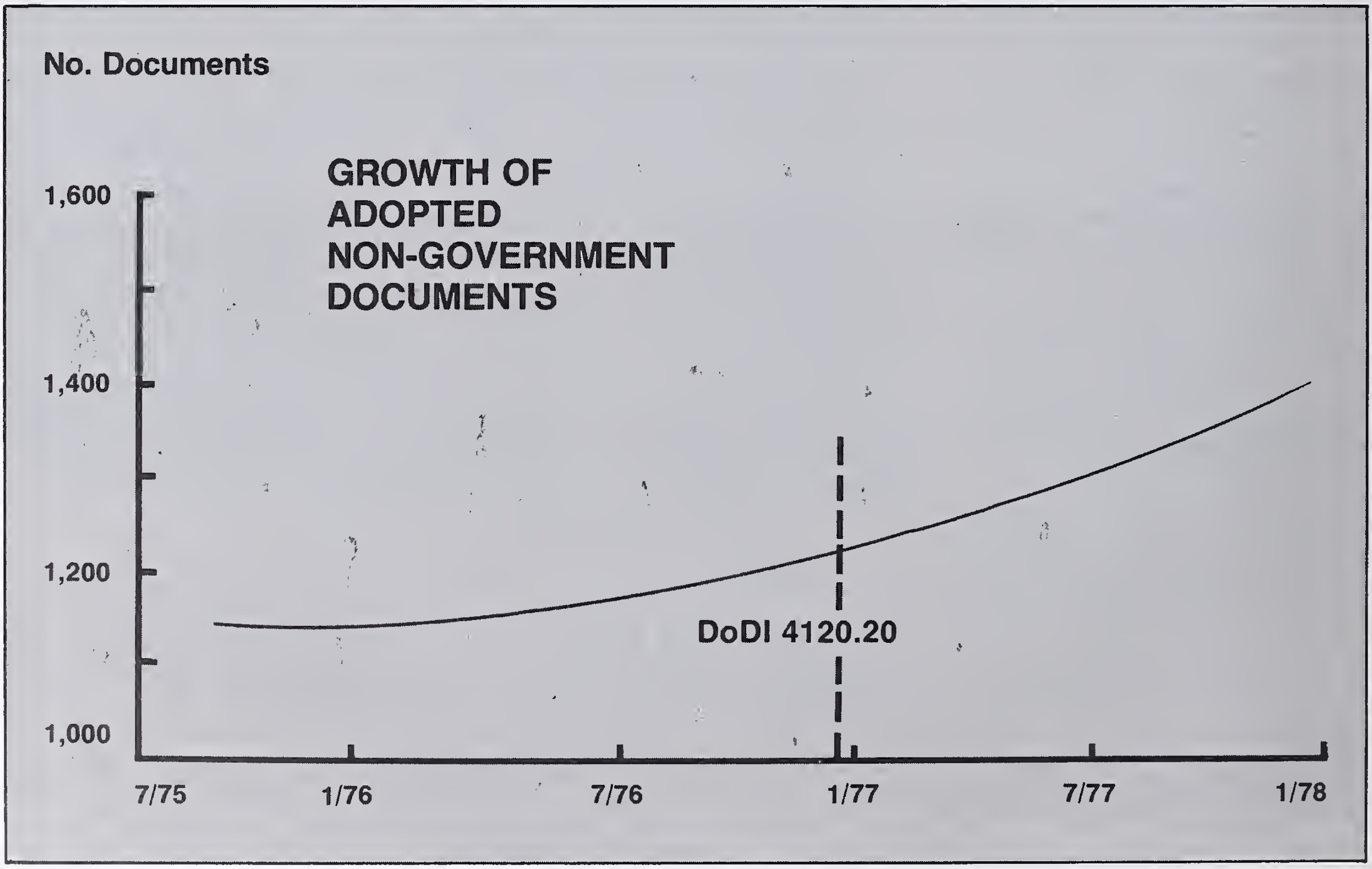
The tool we will be using to accomplish this is four-step procurement. This process has just successfully completed its trial period. It is designed to avoid technical transfusion and auctioneering. Its goal is to award the contract to the best technical proposal within a realistic affordable price. How does it work? The selection authority first narrows the choice down to the winning contractor or contractors and then negotiates with the winner or winners.

The price negotiation is constrained to verification of its realism, and the award is made. Under this system, the only remaining concern is whether or not there has been too much of an attempt by the contractor and his military customer to hold the price down to increase its saleability. This stems from an almost always false hope of beating the costs down in development.

The process must be a team effort which includes the contractor, the Department of Defense and the Congress. If the team members are to work together they must level with each other and avoid surprises.

CLAMP

Another approach to lowering life cycle costs and increasing readiness will be getting industry more involved in the support and maintenance of the weapon systems. A good example of this approach is a program called CLAMP (Closed Loop Aeronautical



Management Program). This program has been developed by Naval Air Systems Command and has just completed its test phase. The trial proved it to be ideally suited for the economical repair and maintenance of systems which have finished production. The results of the trial program show a dramatic decrease in turn-around time and thus an increase in readiness and in lower support costs.

Under this system the Government provides direction, funds and enabling contract provisions, while the contractor is expected to provide all repair parts, labor and dedicated management to meet the actual demand, including a monitoring control over the system. Looking to its future, CLAMP seems to offer at least one good option to provide cost-effective repairs and should be further applied to the other Services.

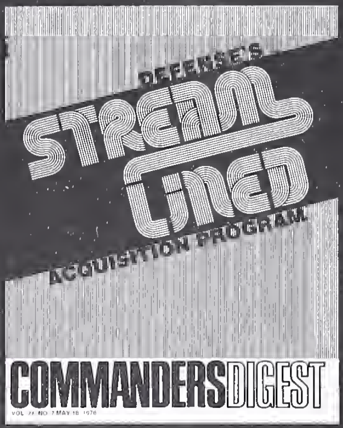
Continuing problems with reliability, maintainability and higher operating and support (O&S) costs of deployed systems indicate that changes are needed in the way these factors are addressed during system acquisition. The Defense Science Board Task Force on Specifications and Standards identified reliability, maintainability, environmental testing, human factors, safety and several other elements as high-cost drivers in the acquisition process. A major overhaul of the requirements in these fields is underway. The objective is to increase DoD's return-on-investment in terms of acquisition cost, improved readiness and effectiveness and lower O&S costs.

Standard procedures and practices developed for use by the private sector will be used directly by the Defense Department where applicable, in preference to military specifications and standards. The military documents will be phased out to the extent possible. Special emphasis is being placed on the tailoring of all specifications and standards to specific programs and contracts, as opposed to their blanket application. This policy will necessitate review and restructuring of many DoD documents. Already, we have adopted more than 1,500 industry specifications and standards. And this is only the beginning.

Coupled with this approach will be an analysis of current management practices to reduce the numbers of Government "managers" in contractor plants to let the contractors and the competitive process "manage" the acquisition. A good example of this is the removal of some of the Government Quality Assurance personnel from contractors' plants. A program called Contractor Assessment Program (CAP) is being tried by the Defense Logistics Agency (DLA) with the cooperation of the Government customers. DLA's experience has shown that, after filling the void left by the Government inspector's removal, one contractor performed its functions better, and with fewer people, while DoD got better products.

Summary

In summary, DoD is working very hard to make the Government a better customer. One thing we are sure of is that Defense's success will be dependent upon the constructive input of industry. It must be remembered that no matter how significant the policy that comes out of the Pentagon, the implementation of the policy is going to be in industry's hands and in the hands of our program managers. We require not only understanding on industry's part, but a high level of support, and we can probably get that best if we have some cooperative management in how we put the implementation schemes together.



VOL. 21, NO. 7/MAY 18, 1978

A publication of the Department of Defense to provide official and professional information to commanders and key personnel on matters related to Defense policies, programs and interests, and to create better understanding and teamwork within the Department of Defense. Published bi-weekly by the American Forces Press Service, 1117 N. 19th St., Arlington, Va. 22209, a unified activity of the American Forces Information Service, OASD (PA). Reproduction of content is authorized.

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JCS REORGANIZES

General David C. Jones, Air Force Chief of Staff, has been named by President Carter as the new Chairman, Joint Chiefs of Staff. He will succeed General George S. Brown whose second JCS Chairman term ends June 30, 1978. The President named the current Air Force Vice Chief of Staff, General Lew Allen Jr., to succeed General Jones. Also, Admiral Thomas B. Hayward, Pacific Fleet Commander-in-Chief, was nominated to be Chief of Naval Operations, the highest military position in the Navy. He will succeed Admiral James L. Holloway III. Like all Presidential appointments, these nominations must be approved by the Senate. The Joint Chiefs of Staff Chairman, the Nation's highest ranking military officer, serves a two-year term and may be reappointed. The Air Force Chief of Staff and the Chief of Naval Operations both serve four-year terms, at the pleasure of the President. The new JCS Chairman, will have served four years as Air Force Chief of Staff when he takes over his new position July 1, 1978. General Jones brings to his new job a widely varied career and a wealth of experience and knowledge. His assignments have included operational and command positions in bomber, tanker, training, and tactical units as well as staff positions. General Jones entered the Army Air Corps in 1942 as an aviation cadet. Over the years he held many important positions in the Air Force, including that of vice commander, 7th Air Force, Vietnam. General Brown, who completes his second term as Chariman, Joint Chiefs of Staff June 30, also held the position of Chief of Staff for the Air Force prior to his present position. General Brown was graduated from the U.S. Military Academy, West point, N.Y. in 1941. After spending three years as Commander, Air Force Systems Command, Brown was selected by the President to be the Air Force Chief in 1973. He held that position for less than a year, when the President named him to serve as Chairman of the Joint Chiefs of Staff.

NEW CHIEFS: Generals Jones (top left), Allen (above), and Admiral Hayward (right).

FLARE

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Subscription Price: $17.00 domestic per year; $4.00 additional for foreign mailing; 65 cents per copy.

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